

CLAIMS:

1. A computer-readable medium (500) having embodied thereon a computer program (501) for the non-invasive quantitative assessment of cardiac perfusion from a series of cardiac images comprising image segments, said computer program being for processing by a computer (50), said computer program comprising

5 a first code segment (73) selecting at least one image segment with normal perfusion, such that cardiac perfusion parameters of the remaining image segments are based on a perfusion parameter of said at least one image segment having normal perfusion.

2. The computer-readable medium according to claim 1, comprising

10 a second code segment (70) dividing a myocardium depicted on said cardiac image series into said image segments,

a third code segment (71) determining a time-intensity profile for distribution of a contrast agent in said myocardium for each of said image segments,

15 a fourth code segment (72) determining said perfusion parameter for each of said time-intensity profiles of said image segments,

a fifth code segment (73) deriving a normal perfusion parameter from said at least one image segment having normal perfusion, and

a sixth code segment (75) calculating a relative perfusion parameter for each of said segments with relation to said normal perfusion parameter.

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3. The computer-readable medium according to claims 1 or 2, said computer program comprising a code segment (76) for calculating a ratio of cardiac perfusion parameters derived at stress and cardiac perfusion parameters derived at rest for each image segment.

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4. The computer-readable medium according to claim 3, wherein said ratio of cardiac perfusion parameters is a myocardial perfusion reserve index (MPRI).

5. The computer-readable medium according to claim 4, wherein said MPRI is calculated from relative maximum upslopes derived at rest and at stress.

6. The computer-readable medium according to claim 3, wherein said ratio of 5 cardiac perfusion parameters is a thresholded MPRI being calculated by thresholding a ratio calculated from relative maximum upslopes derived at rest and at stress.

7. The computer-readable medium according to any of the preceding claims, 10 wherein said perfusion parameter is used for visualizing insufficiently perfused myocardial areas comprising at least one of said image segments.

8. The computer-readable medium according to any of the preceding claims, said first code segment comprising selecting an image segment with the highest perfusion parameter value of all image segments as the image segment having normal perfusion, 15 wherein a high perfusion parameter value is defined as good perfusion.

9. The computer-readable medium according to any of claims 1 to 7, said first code segment comprising selecting an average metric calculated from N image segments with the N highest perfusion parameter values, wherein N is an integer number significantly 20 lower than the total number of image segments.

10. A device (600) in particular a workstation being adapted for the quantitative assessment of cardiac perfusion, said apparatus comprising means for executing the computer program according to claim 1. 25

11. A method for the quantitative assessment of cardiac perfusion from a non-invasively captured cardiac series of cardiac images comprising image segments, said method comprising selecting at least one image segment with a normal perfusion, such that cardiac perfusion parameters of the remaining image segments are based on a perfusion parameter of 30 said image segment with normal perfusion.